In the Claims

Claim 1-4 (canceled)

Claim 5 (currently amended): A sound signal analyzing device as recited in ~~claim 4~~ claim 22 wherein said setting section includes an operator operable by a user, and said setting section, in response to operation of the operator by the user, confirms the ~~characteristic~~ volume level of the sound signal displayed by said display section and thereby sets ~~a state of the characteristic as a predetermined type of parameter~~ the threshold value.

Claim 6 (currently amended): A sound signal analyzing device comprising:

an input section that receives a sound signal;

a pitch extraction section that extracts a pitch of the sound signal received by said input section;

a scale designation section that selects a scale determining condition; ~~and~~

a note determination section that, in accordance with the scale determining condition selected by said scale designation section, determines a particular one of scale notes which the pitch of the sound signal extracted by said pitch extraction section corresponds to; and

a display section that visually displays a current value of a characteristic of the sound signal and a representative value determined by an extracted value of the characteristic in accordance with a predetermined criterion.

Claim 7 (original):   A sound signal analyzing device as recited in claim 6 wherein said scale designation section can select one of a 12-tone scale and a 7-tone scale as the scale determining condition.

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Claim 8 (original):   A sound signal analyzing device as recited in claim 7 wherein to select the 7-tone scale, said scale designation section can select one of a normal scale determining condition for only determining diatonic scale notes and an intermediate scale determining condition for determining non-diatonic scale notes as well as the diatonic scale notes.

Claim 9 (original):   A sound signal analyzing device as recited in claim 8 wherein said note determination section sets frequency ranges for determining the non-diatonic scale notes to be narrower than frequency ranges for determining the diatonic scale notes.

Claim 10 (original):   A sound signal analyzing device as recited in claim 6 which further comprises:

a setting section that sets unit note length as a predetermined criterion for determining a note length; and

a note length determination section that determines a length of the scale note determined by said note determination section with an accuracy of the unit note length.

Claim 11 (canceled)

Claim 12 (original): A sound signal analyzing method comprising the steps of:

receiving a sound signal;

extracting a pitch of the sound signal received by said step of receiving:

setting a scale determining condition; and

in accordance with the scale determining condition set by said step of setting, determining in particular one of scale notes which the pitch of the sound signal extracted by said step of extracting corresponds to.

Claim 13 (original): A sound signal analyzing method as recited in claim 12 which further comprises:

a step of setting a unit note length as a predetermined criterion for determining a note length; and

a step of determining a length of the scale note determined by said step of determining a particular one of scale notes, with an accuracy of the unit note length.

Claim 14 (canceled)

Claim 15 (original): A machine-readable medium containing a group of instructions of a sound signal analyzing program for execution by a computer, said sound signal analyzing program comprising the steps of:

receiving a sound signal;

extracting a pitch of the sound signal received by said step of receiving;

setting a scale determining condition; and

in accordance with the scale determining condition set by said step of setting, determining a particular one of scale notes which the pitch of the sound signal extracted by said step of extracting corresponds to.

Claim 16 (original): A machine-readable medium as recited in claim 15 which further comprises:

a step of setting a unit note length as a predetermined criterion for determining a note length; and

a step of determining a length of the scale note determined by said step of determining a particular one of scale notes, with an accuracy of the unit note length.

Claim 17 (original): A method of receiving a sound signal and automatically representing the sound signal in musical notation, said method comprising:

a first step of receiving at least part of a sound signal to be represented in musical notation, extracting a characteristic of the received sound signal, and setting various parameters with the extracted characteristic;

a second step of setting a scale determining condition;

a third step of receiving a sound signal to be represented in musical notation and determining a pitch of the sound signal using the various parameters set by said first step; and

a fourth step of, in accordance with the scale determining condition set by said second step, rounding the pitch determined by said third step to any one of scale notes corresponding to the scale determining condition.

Claim 18 (original): A method as recited in claim 17 which further comprises:

a step of setting a unit note length as a predetermined criterion for determining a note length; and

a step of determining a length of the scale note determined by said fourth step from the received sound signal, with an accuracy of the unit note length.

Claim 19 (original):   A machine-readable medium containing a group of instructions of a program for receiving a sound signal and automatically representing the sound signal in musical notation via a computer, said program comprising:

a first step of receiving at least part of a sound signal to be represented in musical notation, extracting a characteristic of the received sound signal, and setting various parameters for use in analysis of the sound signal in accordance with the extracted characteristic;

a second step of setting a scale determining condition;

a third step of receiving a sound signal to be represented in musical notation and determining a pitch of the sound signal using the various parameters set by said first step; and

a fourth step of, in accordance with the scale determining condition set by said second step, rounding the pitch determined by said third step to any one of scale notes corresponding to the scale determining condition.

Claim 20 (original):   A device for receiving a sound signal and automatically representing the sound signal in musical notation, said device comprising:

a first section that receives a sound signal having a sound characteristic to be represented in musical notation, extracts a characteristic of the received sound signal, and sets various parameters for use in analysis of the sound signal in accordance with the extracted characteristic;

a second section that sets a scale determining condition;

a third section that receives a sound signal to be represented in musical notation and determines a pitch of the sound signal using the various parameters set by said first section; and

a fourth section that, in accordance with the scale determining condition set by said second section, rounds the pitch determined by said third section to any one of scale notes corresponding to the scale determining condition.

Claim 21 (currently amended):   A device as recited in ~~elam~~ <u>claim</u> 20 which further

comprises a setting section that sets a unit note length as a predetermined criterion for determining a

note length; and

a section that determines <u>a length of</u> the scale note determined by said fourth section from

the received sound signal, with an accuracy of the unit note length.

Claim 22 (currently amended):   A sound signal analyzing device comprising:

an input section that receives sound signals to be analyzed;

a characteristic extraction section that extracts a volume level of a sound signal as it is

received by said input section; ~~and~~

a setting section that sets various parameters for use in subsequent analysis of sound signals

received by said input section in accordance with the volume level ~~characteristic~~ of the sound signal

extracted by said characteristic extraction section, including at least a threshold value<u>; and</u>

<u>a display section that visually displays a current value of the volume level and the threshold</u>

<u>value determined by an extracted value of the volume level in accordance with a predetermined</u>

<u>criterion.</u>

Claim 23 (currently amended):   A sound signal analyzing device comprising:

an input section that receives sound signals to be analyzed;

a characteristic extraction section that extracts at least one of upper and lower pitch limits of a sound signal as it is received by said input section; ~~and~~

a setting section that sets various parameters for use in subsequent analysis of sound signals received by said input section in accordance with the pitch limits characteristics of the sound signal extracted by said characteristic extraction section, including at least a filter characteristic; and

a display section that visually displays the pitch limits characteristics.

Claim 24 (currently amended):   A sound signal analyzing method comprising the steps of:

receiving sound signals to be analyzed;

extracting a volume level of the sound signal as it is received by said step of receiving; ~~and~~

setting various parameters for use in subsequent analysis of sound signals received by said step of receiving in accordance with the volume level of the sound signal extracted by said step of extracting, including at least a threshold value; and

displaying a current value of the volume level and the threshold value determined by an extracted value of the volume level in accordance with a predetermined criterion.

Claim 25 (currently amended):   A sound signal analyzing method comprising the steps of:

receiving sound signals to be analyzed;

extracting at least one of upper and lower pitch limits characteristics of a sound signal as it is received by said step of receiving; ~~and~~ ·

setting various parameters for use in subsequent analysis of sound signals received by said step of receiving in accordance with the pitch limits characteristics extracted by said step of extracting, including at least a filter characteristic; and

a display section that visually displays the pitch limits characteristics.

Claim 26 (currently amended):   A machine-readable medium containing a group of instructions of a sound signal analyzing program for execution by a computer, said sound signal analyzing program causing the computer to execute the steps of:

receiving sound signals to be analyzed;

extracting a volume level of a sound signal as it is received by said step of receiving; ~~and~~

setting various parameters for use in subsequent analysis of sound signals received by said step of receiving in accordance with the volume level of the sound signal extracted by said step of extracting, including at least a threshold value; and

displaying a current value of the volume level and the threshold value determined by an extracted value of the volume level in accordance with a predetermined criterion.

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Claim 27 (currently amended):   A machine-readable medium containing a group of

instructions of a sound signal analyzing program for execution by a computer, said sound signal

analyzing program causing the computer to execute the steps of:

receiving sound signals to be analyzed;

extracting at least one of upper and lower pitch limits of the sound signal as it is received by

said step of receiving; ~~and~~

setting various parameters for use in subsequent analysis of sound signals received by said

step of receiving in accordance with the pitch limits characteristics extracted by said step of

extracting, including at least a filter characteristic; and

a display section that visually displays the pitch limits characteristics.

Claim 28 (canceled)